

EX

# **Notice of Allowability**

Application No.

10/773,015

Examiner

Xiuqin Sun

Applicant(s)

BERTRAND, DAVID

Art Unit

2863

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/25/2006.
2. ☒ The allowed claim(s) is/are 1-16.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## **Attachment(s)**

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|--|--|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date <u>See Continuation Sheet</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date <u>10/23/2006</u>.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
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Continuation of Attachment(s) 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date: 09/25/06,10/19/06&2/5/04.

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with attorney Carl B. Wischhusen on October 23, 2006.

Replace the Claims 1, 2, 3 and 15 with the following:

--1. (Currently Amended) A method of determining at least one characteristic of a tire selected from: the three components of a resultant of forces which are exerted by the road on the contact area of a tire, the self-alignment torque generated by the tire, the camber, and the pressure; the method comprising the steps of obtaining at least two measurements of circumferential extension or contraction between at least a pair of fixed points positioned at a same radius and being separated in azimuth in at least one sidewall of the tire, the at least two measurements being made at two predetermined azimuth positions of the tire that are separated in azimuth from the center of the contact area, calculating the characteristic from the at least two measurements, and storing the calculated characteristic generating a signal representing the calculated characteristic, for electronically controlling a vehicle.—

--2. (Currently Amended) A method of determining at least one characteristic of a tire selected from: the three components of a resultant of forces which are exerted by the road on the contact area of a tire, the self-alignment torque generated by the tire, the camber, and the pressure; the method comprising the steps of obtaining at least two measurements of circumferential extension or contraction between at least a pair of fixed points positioned at a same radius and being separated in azimuth in each of the sidewalls of the tire, the at least two measurements being made at two predetermined azimuth positions of the tire that are separated in azimuth from the center of the contact area, calculating the characteristic from the at least two measurements, and ~~storing the calculated characteristic,~~ generating a signal representing the calculated characteristic, for electronically controlling a vehicle,

wherein the circumferential contraction or extension of both of the sidewalls is estimated by measuring the distance between the cords of the carcass ply in the sidewalls.--

--3. (Currently Amended) A method of determining at least one characteristic of a tire selected from: the three components of a resultant of forces which are exerted by the road on the contact area of a tire, the self-alignment torque generated by the tire, the camber, and the pressure; the method comprising the steps of obtaining at least two measurements of circumferential extension or contraction between at least a pair of fixed points positioned at a same radius and being separated in azimuth in each of the sidewalls of the tire, the at least two measurements being made at two predetermined

azimuth positions of the tire that are separated in azimuth from the center of the contact area, calculating the characteristic from the at least two measurements, and ~~storing the~~ calculated characteristic, generating a signal representing the calculated characteristic, for electronically controlling a vehicle.

wherein the circumferential contraction or extension of both of the sidewalls is estimated by measuring the distance between wires forming a sensor which measures a variation in capacitance linked with the distance separating two electrodes.--

--15. (Currently Amended) A method of determining at least one selected characteristic of a tire selected from: the three components of a resultant of forces which are exerted by the road on the contact area of a tire, the self-alignment torque generated by the tire, the camber, and the pressure, comprising the following steps:

determining measurement azimuths and collecting values of circumferential extension of at least one sidewall during varied stresses on the tire which stresses are selected to span a full range in which evaluation of the at least one selected characteristic will be permitted in normal use, the selected stresses giving rise to all the couplings liable to be encountered during normal use,

obtaining values of circumferential extension with a first measurement means and values of the at least one selected characteristic associated with circumferential extension with a second measurement means in order to form a training base,

determining coefficients of a transfer function to establish a link between the values of circumferential extension and the values of the at least one selected characteristic using the training base,

generating signals representing estimates of the at least one selected characteristic obtained by the transfer function, for comparison to measured values, and

testing the transfer functions by comparing the generated signals representing estimates of the at least one selected characteristic ~~obtained by the transfer function~~ with the values obtained by a direct measurement means, ~~[[and]]~~

~~storing the values of the at least one selected characteristic.--~~

### ***Allowable Subject Matter***

2. Claims 1-16 are allowed.

### ***Reasons for Allowance***

3. The following is an examiner's statement of reasons for allowance:

Please see previous office action dated on 06/26/2006 for reasons for allowance.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Contact Information***

Art Unit: 2863

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (571)272-2280.

The examiner can normally be reached on 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571)272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

XS  
October 26, 2006

  
MICHAEL NGHIEM  
PRIMARY EXAMINER